Jones on Warblers' Songs.! — Nearly six years ago Mr. Jones requested the members of the Wilson Ornithological Chapter of the Agassiz Association to begin a critical study of the songs of Warblers, and the results of their observations in connection with his own notes, covering a period of fifteen years, and all available published material on the songs of these birds are brought together in this useful and suggestive paper.

Before proceeding to a detailed treatment of the song of each species Mr. Jones discusses the development of the Warblers' song-type, the diurnal and seasonal song periods, the kinds of song, and variability in song. Many Warblers possess two kinds of song, which Mr. Jones designates as Call Songs and Passion Songs. The former is the 'every day' song of the species, which we are glad to see Mr. Jones does not consider as addressed especially to the female, but as an announcement of the bird's presence, a challenge, or reply to a rival, and, to our mind, chiefly as an irrepressible expression of the intense physiological vigor of the season, when it becomes the "passion song," which in response to extreme emotion carries the singer off its feet into the air "on quivering wings to pour out its melody without pause until the inspiration has passed."

With others who have attempted to describe birds' songs, Mr. Jones appreciates the difficulty of their adequate presentation. With most Warblers, especially the Dendroicas, this is particularly true. Musical annotation is of little service; and syllabification can, at the best, give but a vague idea of the original. However, careful descriptions may help us to identify the song, after we have heard it, and Mr. Jones's paper is therefore of value to field students, who uniformly find Warblers the most difficult of our land-birds to identify.

A 'Field Key to the Spring Male', Warblers of North America concludes this excellent piece of work. — F. M. C.

Proceedings of the Nebraska Ornithologists' Union.<sup>2</sup> The Nebraska Ornithologists' Union was organized at Lincoln, Nebr., on Dec. 16, 1899, with the following officers: Prof. Lawrence Bruner, President; I. S. Frostler, Vice-President, Dr. R. H. Wolcott, Recording Secretary; W. D. Hunter, Corresponding Secretary. The papers read at the first meeting are now presented in an octavo pamphlet of some forty pages and include the President's address, 'Ornithology in Nebraska,' in which

<sup>&</sup>lt;sup>1</sup> The Songs of Warblers (Mniotiltidæ). By Lynde Jones, M.S., Instructor in Zoölogy, Laboratory Bulletin No. 10, Oberlin College, Oberlin, Ohio, March 20, 1900. Also issued as Wilson Bulletin No. 30. 8vo, pp. 56.

<sup>&</sup>lt;sup>2</sup> Proceedings of the Nebraska Ornithologists' Union at its First Annual meeting, Lincoln, Nebr., Dec. 6, 1899. Edited by Robt. H. Wolcott. Svo, pp. 44, 1 pl.

the characteristics of the avifauna of the State are pointed and the educational value of bird study in the schools commented on; 'A Twenty-three years' Record kept by Dr. A. L. Child of Plattsmouth, Neb.,' by Dr. R. H. Wolcott; 'Additional Notes and Observations on the Birds of Northern Nebraska,' by Rev. J. M. Bates, notes on 62 species; 'The Bird Fauna of the Salt Basin, near Lincoln,' by J. S. Hunter, with notes on 89 species; 'Some Bird Notes from the Upper Elkhorn,' by Merritt Cary, notes on 208 species; 'Some notes on the Nesting of the Raptores of Otoe County, Nebraska,' by M. A. Carriker, Jr., 'How to Popularize Ornithology,' by Wilson Tout, advocating the study of birds in schools; 'A Plea for the English Sparrow,' by Lawrence Skaw, a native of Denmark who, believing the English Sparrow to be harmless in his native land considers it desirable here; and 'Suggestions as to an accurate and uniform Method of Recording Observations,' by Dr. R. H. Wolcott, recommending a more exact use of terms in describing a bird's relative numbers.

The formation of State Ornithological Clubs is always a matter for congratulation and the first publication of the Nebraska Ornithologists' Union, assures us that this new association will exert a widespread influence in increasing our knowledge of Nebraska birds and in arousing an interest in ornithology in that State. — F. M. C.

Chapman's 'Bird Studies with a Camera.' 1—In this neat volume the author embodies the results of several years' hard and painstaking labor in a comparatively new field—that of photographing birds in a state of nature. In his introductory remarks the author says: "Bird photography, as I would encourage it, does not mean simply photographing birds; it means the use of the camera as an aid in depicting the life histories of birds." With that end in view, Mr. Chapman has presented us with an attractive and pleasing work which cannot fail to be of the utmost interest to the bird student, because of the great number of ornithological facts recorded therein by the camera.

Chapter I which treats of the bird photographer's outfit, takes up the subject of the camera, lens, shutter, etc. The practical tests which the author has given most of the apparatus now on the market, with the additional advantage of being in a position to compare notes with a wide circle of professional and amateur photographers, and thus reap the benefit of their experience, enables him to speak authoritatively on these

<sup>&</sup>lt;sup>1</sup> Bird Studies | with a Camera | With Introductory Chapters | on the Outfit and Methods | of the Bird Photographer | By Frank M. Chapman | Assistant Curator of Vertebrate Zoölogy | in the American Museum of Natural His- | tory, and Author of Handbook of Birds | of Eastern North America, Bird-Life, etc. | With over one hundred photographs | from Nature by the Author | New York | D. Appleton and Company | 1900 — 12mo, pp. xvi + 218. \$1.75.